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IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996.

DOCKET NO. T-00000A-97-0238

QWEST CORPORATION'S SUBMISSION OF ADDITIONAL EVIDENCE REGARDING PREORDER TO ORDER INTEGRATION

Arizona Corporation Commission DOCKETED

MAY 2 3 2002

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Qwest Communications International, Inc. ("Qwest") hereby submits this

Preorder to Order Integration information as further evidence supporting CLECs ability
to successfully integrate EDI preorder and order information.

I. Introduction

"Preorder to order integration" describes the ability for CLECs to electronically transfer information returned on preorder responses onto the order without manipulation. The IMA-GUI interface integrates preorder to order so that CLECs who use the IMA-GUI automatically enjoy the benefits of such integration. The IMA-EDI interface supports integration; however, the degree to which a CLEC chooses to take advantage of preorder to order integration is up to the CLEC itself.

As set forth below, pseudo-CLEC processing, commercial information, and Qwest's own internal IMA development processes support HP's findings in the Arizona OSS test that CLECs can and have in fact integrated Qwest's EDI preorder transactions to automatically populate their orders.

II. THE ROC PSEUDO-CLEC DEVELOPED AND UTILIZED PREORDER TO ORDER INTEGRATION

In the ROC OSS test, the Pseudo-CLEC developed an EDI interface that was integrated between preorder and order so that the MTP order requirement for "integration of preorder and order data functionality which transfers values from preorder responses to ordering documents" could be tested.

The ROC Pseudo-CLEC successfully developed this functionality through the development, testing, and implementation of its 7.0 and 8.0 EDI interfaces, based on the

established tools available to CLECs (i.e., I-Charts, Developer Worksheets, Qwest's EDI Implementation staff). Then, during its actual transactional testing, the Pseudo-CLEC successfully processed thousands of LSRs by utilizing the integration techniques it had built, as well as exercising manual processing (re-entering preorder returned information into order transactions) to ensure both types of processing were adequately tested.

The ROC Pseudo-CLEC developed many preorder to preorder and preorder to order integration functions. For example, the Pseudo-CLEC would execute an address validation query and use the dynamically returned data to populate a subsequent preorder query, such as obtaining a CSR. The Pseudo-CLEC would then utilize that same data to submit the LSR. The ROC Pseudo-CLEC also parsed CSRs for Resale, UNE-P, and Unbundled Loop products. This involved using USOC information from the CSR query (CSRR) to populate Service and Equipment (S&E) information into a table that was then accessed to populate the Resale form.²

A complete list of preorder to preorder and preorder to order functionality and a description of the Pseudo-CLEC's experience is detailed in HP's Pre-Order/Order Integration Field Comparison Report, section 5³:

As part of MTP Test 12, the P-CLEC implemented the following pre-order to pre-order integration functions. The P-CLEC initially added address information into an address table that was subsequently used to populate address fields in the AVQ, CSRQ, FAQ, SAQ, TNAQ, RLDQ and MPQ. Table 5.1 identifies those fields that were integrated in pre-order to pre-order processing.

¹ ROC MTP Version 5.2, dated April 9, 2002, section 12.4, see http://www.nrri.ohio-state.edu/oss/master/master.htm

² HP's Pre-Order/Order Integration Field Comparison Report, Version 1.0, Dated April 19, 2002 for the ROC 3rd Party Test of Qwest Operational Support Systems, section 5, see http://www.nrri.ohio-state.edu/oss/master/kpmg_draft/final_report.htm

³ A copy of the report is attached as Exhibit A

Table 5.1 – PCG Pre-Order to Pre-Order Integration

Field in Address Table	Maps to AVQ	Maps to CSRQ	Maps to FAQ	Maps to SAQ	Maps to TNAQ	Maps to RLDQ	Maps to MPQ
LNAME	LNAME	CUSTNAME					
SANO	SANO	SANO	SANO		SANO	SANO	
SASF	SASF	SASF	SASF		SASF	SASF	
SASN	SASN	SASN	SASN		SASN	SASN	
ROOM	ROOM		ROOM		ROOM	ROOM	
BLDG	BLDG		BLDG		BLDG	BLDG	
FLOOR	FLOOR		FLOOR		FLOOR	FLOOR	
AHN	AHN		AHN		AHN	AHN	
ROUTE	ROUTE		ROUTE		ROUTE	ROUTE	
BOX	BOX		BOX		BOX	BOX	
SALOC	SALOC	SALOC	SALOC		SALOC	SALOC	
SAST	SAST	SAST	SAST	SAST	SAST	SAST	
SAZC	SAZC		SAZC		SAZC	SAZC	
CALA	CALA		CALA		CALA	CALA	
SITEID					SITEID		
TTA					TTA		
LSO			LSO	LSO			LSO

The Integration Field Comparison Report also states in Section 5:

As part of MTP Test 12, the P-CLEC implemented the following pre-order to order integration functions. The P-CLEC initially added address information into an address table that was subsequently used to populate address fields in the LSR, EU, RPL and DL forms. The P-CLEC also used USOC information from CSRR to load Service and Equipment information into a table that was subsequently used in the RS form. Table 5.2 identifies those fields that were integrated in pre-order to order processing.

Table 5.2 - PCG Pre-Order to Order Integration

Table	Data Field	Maps to LSR	Maps to EU	Maps To RS	Maps to RPL	Maps to DL
Address	LNAME		NAME			
Address	SANO		SANO		SANO	LANO
Address	SASF		SASF		SASF	LASF
Address	SASN		SASN		SASN	LASN
Address	ROOM		ROOM		ROOM	
Address	BLDG		BLDG		BLDG	
Address	FLOOR		FLOOR		FLOOR	
Address	AHN		AHN		AHN	
Address	ROUTE		ROUTE		ROUTE	
Address	BOX		BOX		BOX	
Address	SALOC		CITY		CITY	LALOC
Address	SAST		STATE		STATE	LAST
Address	SAZC		ZIPCODE		ZIPCODE	LAZC
Address	CALA		CALA		CALA	

Table	Data Field	Maps to LSR	Maps to EU	Maps To RS	Maps to RPL	Maps to DL
Address	LSO	LSO			RLSO	
Cust Svc	# TN			RSQTY		
Cust Svc	TN			TN		
Cust Svc	PIC			PIC		
Cust Svc	LPIC			LPIC		
Cust Svc	USOC			FEATURE		
Cust Svc	ACTIVITY			FA		
Cust Svc	FFID			FEATUREDETAIL in		
			ĺ	the format		1
				"/"FFID"space"FFIDD		
				ATA. Do not map FFID		
				= PIC, LPIC, or TN.		
Cust Svc	FFIDDATA			FEATUREDETAIL in		
				the format		
				"/"FFID"space"FFIDD		
				ATA. Do not map		
				FFID= PIC, LPIC, or		
				TN.		

As a result of having achieved preorder to preorder and preorder to order integration, HP concluded that it "does not feel that [sic] are any issues that would prohibit a CLEC from integrating Qwest data with their internal application system(s)."

III. Two Entities Have Provided Positive Input Stating That They Have Been Successful in Achieving Preorder to Order Integration

During the January 31, 2002 Arizona OSS Workshop, Qwest submitted a letter from Telcordia, a national service bureau, stating that it has been successful in integrating preorder to order and offers to CLECs a single integrated interface.⁵

Additionally, NightFire, a national service bureau, has developed an interface to Qwest's EDI that is integrated between preorder and order, including parsed CSR. This integrated interface is being used by NightFire's CLEC customers. NightFire provides information supporting this in a letter, attached here as Exhibit C

⁴ HP's Pre-Order/Order Integration Field Comparison Report, section 6, see http://www.nrri.ohio-state.edu/oss/master/kpmg draft/final report.htm

IV. QWEST UTILIZES THE SAME DEVELOPER WORKSHEETS PROVIDED TO EDI CLECS WHEN ENHANCING IMA-GUI TO ENSURE THAT PREORDER TO ORDER INTEGRATION IS ACHIEVED

Qwest has integrated preorder and order information using the same set of technical documentation that CLECs use to build an EDI interface. Qwest has achieved this integration in the IMA-GUI interface. This integration includes electronically transferring information from preorder responses into subsequent preorder transaction requests and transferring information from preorder responses onto orders. Parsed CSR is an example of the integration achieved between preorder and order information.

That Qwest used the same technical documentation is key because integration is achieved at the data field level. For example, a preorder field that contains a two-digit numeric value can be electronically transferred to the corresponding order field with the same two-digit numeric requirement. The consistency of the preorder and order fields permits integration. The technology that is employed to accomplish integration is not the critical element. The IMA-GUI and EDI technologies are two possible technologies to accomplish integration. Therefore, Qwest's achieving integration in the IMA-GUI using the same technical documentation as that provided to EDI CLECs demonstrates that CLECs can integrate preorder and order in their EDI interfaces should they choose to do so.

The common set of technical documentation is the Developer Worksheets that Qwest provides to EDI CLECs as an appendix to the Disclosure Document. ⁶

Specifically, Developer Worksheets specify field lengths, field characteristics, and any

⁵ Qwest Exhibit 8-7; Arizona OSS Workshop 8, January 31, 2002. Qwest has attached the Telcordia letter as Exhibit B.

⁶ http://www.qwest.com/wholesale/ima/edi/document.html.

conditions related to the usage of specific fields for specified products. Qwest's IMA

Development, System Test and Regression Test teams used developer worksheets to

develop, test and implement the IMA-GUI in its first implementation on January 1, 1997

and has continued to used them to the many enhancements to the IMA-GUI since then.

Qwest has achieved preorder to order integration using Developer Worksheets.

CLECs can also achieve preorder to order integration using Developer Worksheets.

V. QWEST HAS MET THE FCC REQUIREMENTS FOR PREORDER TO ORDER INTEGRATION

The FCC requires that a BOC's application-to-application interface must allow CLECs to:

Integrate pre-ordering information into the BOC's ordering interface and the carriers' back office systems, a finding that is fundamental to a BOC's showing of nondiscriminatory access to OSS. The FCC has also indicated that a BOC with integrated pre-ordering and ordering functions must provide competing carriers with access to the same capability. In this regard, the BOC must enable competing carriers to transfer pre-ordering information electronically to the BOC's ordering interface or to the carriers' own back office systems, which may require "parsing" pre-ordering information into identifiable fields.⁷

Qwest follows these FCC requirements by allowing CLECs to integrate preorder information effectively with the their own order information with a minimal amount of manipulation. HP as the Pseudo-CLEC in the Arizona 271 test finds that Qwest provides the opportunity for effective integration in both of its reports.⁸

The FCC states most recently in the GA/LA 271 Order that:

⁸ HP's Pre-Order to Order Integration Report, Version 5.0, section 1.1.

⁷ Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York, CC Docket No. 99-295, Memorandum Opinion and Order, FCC 99-404 (rel. Dec. 22, 1999) ("BANY New York 271 Order"), para. 137.

Our prior orders dictate that a BOC can demonstrate the ability of competitive LECs to integrate pre-ordering and ordering functions if the BOC parses the customer record information into identifiable fields for the competing carriers.⁹

Qwest satisfies this requirement. HP in the ROC integrated preorder to order successfully using Qwest's parsed CSR.

The FCC also states in the GA/LA 271 Order:

As in previous section 271 proceedings, we rely primarily on evidence of actual commercial usage, submitted by competing LECs active in BellSouth's territory and by BellSouth, that carriers have been able to successfully integrate certain pre-ordering and ordering functions.¹⁰

Qwest also satisfies this requirement. As evidenced by the two attached letters, Telecordia and NightFire have stated in writing that they have successfully achieved integration in their EDI interfaces that are used to serve CLEC customers in Qwest's territory.

VI. CONCLUSION

Qwest has demonstrated that integration of preordering and ordering information using its EDI interface is possible and has in fact been accomplished by two parties. HP as the Pseudo-CLEC in both the ROC and Arizona has found that integration is possible. In the ROC test, HP actually achieved integration including CSR information. Two service bureaus (need to explain this above) have attested in writing to having successfully integrated preordering and ordering using Qwest's EDI interface. Qwest, itself, has provided CLECs with an integrated interface, the IMA-GUI for many years. Integration in the IMA-GUI is accomplished using the same technical documentation that

⁹ Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., And BellSouth Long Distance, Inc for Provision of In-Region, InterLATA Services In Georgia and Louisiana CC Docket Number 02-35 (rel. May 15, 2002), ("GA/LA 271Order") ¶ 119.

is provided to EDI CLECs to build their EDI interface. This technical documentation also permits them to integrate their EDI interfaces should they choose to do so.

RESPECTFULLY SUBMITTED this 23rd day of May, 2002.

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¹⁰ GA/LA 271 Order, ¶122.

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Pre-Order/Order Integration

Field Comparison Report

Analysis of Qwest IMA EDI Release 7.0

Regional Oversight Committee (ROC)

3rd Party Test of Qwest Operational Support Systems
(OSS)



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Project Name: ROC 3rd Party Test of Qwest OSS

Project Manager: Geoff May

FocusPM Phase:

Document Version No: 1.

Document Version Date:

04/19/02

Quality Review Method:

Prepared By: Kathi A Frank

Preparation Date:

04/03/02

Reviewed By:

Review Date:

Distribution List

From		Date	Phone/Fax
· · · · · · · · · · · · · · · · · · ·			
То	Action*	Due Date	Phone/Fax

^{*}Action Types: Approve, Review, Inform, File, Action Required, Attend Meeting, Other (please specify)

Version History

Ver. No.	Ver. Date	Revised by	Description	Filename
1.0	First Public Release			
		·		

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1. Definition of Terms/Acronyms

Table 1.1 identifies the acronyms used throughout this report.

Table 1.1 - Terms and Acronyms

Tem	Definition
CLEC	Competitive Local Exchange Carrier
EDI	Electronic Data Interchange
FID	Field Identifier
HPC	Hewlett Packard Consulting
ILEC	Incumbent Local Exchange Carrier
IMA	Interconnect Mediated Access
LSOG	Local Service Ordering Guidelines
LSR	Local Service Request
oss	Operation Support Systems
P-CLEC	Pseudo-Competitive Local Exchange Carrier
USOC	Universal Service Order Code

2. Reference Documents

Table 2.1 provides a complete list of documents used to compile information for this report.

Table 2.1 - Reference Documents

Documentation	Issued By
Local Service Ordering Guidelines (LSOG) Issue 3	Alliance for Telecommunications Industry Solutions (ATIS)
EDI Implementation Guidelines for Interconnect Mediated Access (IMA)	Qwest Communications, Inc.
Disclosure Document	Qwest Communications, Inc.



3. Introduction

The *Introduction* provides a general background, purpose, and scope for this document and explains the reasons behind the document's generation.

3.1. Background

The Alliance for Telecommunications Industry Solutions (ATIS) publishes and maintains the Local Service Ordering Guidelines (LSOG). The LSOG is the standard for ordering and provisioning within the Telecommunications Industry. A provider (ILEC) may interpret these guidelines when creating specifications that define how a CLEC should order and provision services from the ILEC.

The degree to which ILECs and CLECs conform to the LSOG guidelines has a direct impact on the internal application systems of both parties. The closer each company conforms to the other, the easier it is for the CLEC and ILEC that are exchanging data to build and maintain their respective internal application systems. This becomes even more critical when multiple CLECs and ILECs are exchanging and integrating data into their respective internal applications.

3.2. Purpose

This document analyzes Qwest Communications Inc. (Qwest) Operations Support Systems (OSS) guidelines, *IMA EDI Disclosure Document – Release 7.0*, and its adherence to the industry standard LSOG Issue 3 guidelines. This document further analyzes Qwest's conformity to pre-order, order, and post-order processing. All discrepancies, and their perceived impacts on a CLEC's ability to integrate, are documented.

Since criteria have not been established for HPC to assess the degree to which a CLEC can integrate with Qwest, this document does not include any recommendations. The document provides only the analysis that HPC performed based on a fundamental approach to integration.

3.3. Scope of this Document

This report's analysis is limited to those IMA EDI Disclosure Document chapters used by the P-CLEC during its execution of Master Test Plan (MTP) Test 12. The products and transactions covered in the chapters are listed in Table 3.1.

Table 3.1 – Products and Transactions included in MTP – Test 12

Products and Transactions	Туре
Address Validation	Pre-Order
Appointment Availability	Pre-Order
Appointment Selection	Pre-Order
Cancellation	Pre-Order



Products and Transactions	Туре
Connecting Facility Assignment	Pre-Order
Customer Service	Pre-Order
Design Layout Record	Pre-Order
Facility Availability	Pre-Order
Meet Point	Pre-Order
Raw Loop Data	Pre-Order
Service Availability	Pre-Order
Telephone Number Availability	Pre-Order
Telephone Number Selection	Pre-Order
Centrex 21	Order
Centrex Plus	Order
DID In Only Trunks	Order
ISDN-PRI Resale Facility	Order
ISDN-PRI Resale Trunk	Order
Listing Only	Order
Local Number Portability	Order
PBX	Order
POTS	Order
Private Line	Order
Shared Loop	Order
Unbundled Loop Distribution Loop	Order
Unbundled Loop	Order
Unbundled Loop w/Number Portability	Order
UNE-C Private Line	Order
UNE-P POTS	Order
Completion	Post-Order
Firm Order Completion (FOC)	Post-Order
Jeopardy/Non-Fatal/Fatal	Post-Order
LSR Status	Post-Order
Status Change Inquiry- Auto Push	Post-Order

Each group of documents (pre-order, order, post-order) was analyzed to determine:

- Number of fields (Qwest and LSOG);
- Number of fields included in Qwest's Disclosure Document;
- Number of fields used by Qwest;



- Fields with integration issues;
- The impact those fields have on the integration process;
- How is the field initiated (ILEC, CLEC, constant, calculation or not used);
- Pre-Order to Pre-Order integration comparison;
- Pre-Order to Order integration; and,
- Post-Order integration.

When analyzing this information, the types of internal application systems an ILEC utilize was not a factor. Instead, HPC took a generalized approach to integration to determine which discrepancies might impact a CLEC's ability to integrate.

3.4. Documentation Available to CLECs

Qwest maintains the website, http://www.qwest.com/wholesale/ima/edi/document.html, which contains all EDI documentation Qwest provides to CLECs. This website contains the EDI Implementation Guidelines for Interconnect Mediated Access (IMA) and a link to the IMA EDI Disclosure Document – Release 7.0.

The EDI Implementation Guidelines for Interconnect Mediated Access (IMA) provide a CLEC with information necessary to implement EDI processing with Qwest. The document defines both the implementation process and the technical guidelines required to achieve implementation.

Qwest's IMA EDI Disclosure Document - Release 7.0 defines:

- EDI Business Model/Processes;
- Developer Worksheets Business rules for pre-order, order and post order; and.
- EDI Trading Partner Access Information Data mapping examples, enveloping and general guidelines.

The *IMA EDI Disclosure Document* is published on the Qwest website at http://www.gwest.com/disclosures/netdisclosure409.html.

Additionally, Qwest's *IMA EDI Disclosure Document* indicates that CLECs should reference the Qwest Technical Publications to further clarify fields contained in the *IMA EDI Disclosure Document*. The Technical Publications can be found on the Qwest website at http://www.gwest.com/wholesale/notices/techPub.html.

Qwest also maintains a listing of USOCs and FIDs on its website at http://usocfidfind.gwest.com/.

3.5. Training Available to CLECs

Qwest provides training information on their website at http://www.qwest.com/wholesale/trainingNotice.html.



4. Qwest IMA 7.0 Field Comparison

The field comparison provides a parallel examination of Qwest forms against standardized LSOG 3 forms. The forms, etc., are compared on a field-to-field basis, the differences are explained, and any issues and impacts are identified. To facilitate the understanding, HP's field comparison is broken out into the standard chronological segments of the ordering process (pre-order, order, post-order, etc.).

HPC uses a basic criterion to identify issues: where a Qwest form differs from a standard form in its usage of an individual field, HPC determines whether or not Qwest's usage would complicate the ordering process. For example, where a standardized field may allow for up to fifty characters, and Qwest limits it to ten, HPC identifies this as an issue in that it may prevent a CLEC from entering the appropriate number of characters based on its particular data. If a field differs, but HPC cannot determine any noticeable impact, HPC notes the difference, but states that no impact is foreseeable. However, it should be noted that in all cases, HP's determination is limited to HP's experience, and does not necessarily represent the potential impacts to all CLECs.

4.1. Pre-Order

This section compares Qwest's pre-order forms to the LSOG 3 standard pre-order forms.

4.1.1. Pre-Order Document Descriptions: Query and Response Forms

Table 4.1 identifies and cross-references the Pre-Order query and response documents used in MTP Test 12 with the corresponding LSOG 3 form. LSOG 3 identifies only one pre-order form. This form is used to create eight (8) different Qwest pre-order transactions. Any form used by Qwest that was not part of LSOG 3 was considered by HPC to be a non-standard form. The non-standard forms included in Table 4.1 are: Connecting Facility Assignment, Customer Service Record, Design Layout Record, Meet Point and Raw Loop Data.

Document Description Query LSOG Standard or Response Form Non Standard **Form Form Form** Address Validation AVQ **AVR POPINQP** Standard Appointment Availability AAQ **AAR POPINQP** Standard Appointment Selection **ASQ ASR POPINQP** Standard CTQ CTR **POPINQP** Cancellation Standard **CFAR** Connecting Facility Assignment **CFAQ** Non-Standard Customer Service Record **CSRQ CSRR** Non-Standard Design Layout Record **DLRQ DLRR** Non-Standard FAQ **FAR Facility Availability POPINQP** Standard MPQ **MPR** Meet Point Non-Standard

Table 4.1 - Pre-Order Query and Response Forms



Document Description	Query Form	Response Form	LSOG Form	Standard or Non Standard Form
Raw Loop Data	RLDQ	RLDR		Non-Standard
Service Availability	SAQ	SAR	POPINQP	Standard
Telephone Number Availability	TNAQ	TNAR	POPINQP	Standard
Telephone Number Selection	TNSQ	TNSR	POPINQP	Standard

4.1.2. Pre-Order Field Statistics

First, HPC looked at the available pre-order fields as a whole, and then reviewed them on a form-by-form basis. For example, the SASN field is identified once in the LSOG as a field used in the pre-order process, and is used on multiple Qwest pre-order forms. In its analysis, HPC identifies the SASN as an individual Data Field.

Once the Data Field compilation was complete, HPC further analyzed whether Qwest included the field on a form, and whether Qwest used the field. Qwest's Disclosure Document defines Field Usage as "Required," "Conditional," "Optional," "Not Used," or "Prohibited." HPC identified only those fields that Qwest identifies as "Required," "Conditional," or "Optional" as actually used by Qwest.

In Table 4.2, HPC calculated the total number of pre-order data fields based on the number of LSOG 3 and Qwest-specific data fields. HPC identified Qwest-specific data fields as any data field that was not included in LSOG 3 as a pre-order data field.

Table 4.2 - Pre-Order Data Field Statistics

Description	Total Number	% of Total
LSOG Data Fields	48	17%
Qwest-Specific Data Fields	238	83%
Total Number of Data Fields	286	



Table 4.3 indicates how many of the Total Number of Data Fields from Table 4.2 are included in the Qwest Disclosure Document for pre-order processing.

Table 4.3 - Pre-Order Data Field Inclusion by Qwest

Description	Total Number	% of Total	Total Number Included	% of Total Included
Qwest-Specific Data Fields – Included	238	83%	238	87%
LSOG Data Fields – Included	37	13%	37	13%
LSOG Data Fields – Not Included	11	4%		
Total Number of Included Data Fields	286		275	

Table 4.4 indicates how many of the Total Number of Included Data Fields from Table 4.3 are used in the Qwest Disclosure Document for pre-order processing.

Table 4.4 - Pre-Order Data Field Usage by Qwest

Description	Total Number	% of Total	Total Number Used	% of Total Used
Qwest Specific Data Fields – Used	234	85%	234	87%
Qwest Specific Data Fields – Not Used	4	1%		
LSOG Data Fields – Used	36	13%	36	13%
LSOG Data Fields - Not Used	1	0%		
Total Number of Used Data Fields	275		270	

Table 4.5 indicates the number of times each data field is used across all Qwest pre-order forms. This analysis identifies which fields are Qwest-specific fields, and which are LSOG fields.

Table 4.5 - Total Number of Pre-Order Data Field across all Forms

Description	Total Number	% of Total
LSOG Data Fields	356	45%
Qwest-Specific Data Fields	431	55%
Total Number of Data Fields	787	



4.1.3. Data Integration Issues

After reviewing the Qwest IMA EDI Disclosure Document, HPC encountered various issues that could impact a CLEC's ability to integrate its internal systems. These issues are classified into three categories:

- Generic Integration Issues (Table 4.6);
- Field Length Variations Across Qwest Pre-Order Forms (Table 4.7); and,
- Field Length Variations Between Qwest and LSOG (Table 4.8).

The tables classify each issue's perceived impact on a CLEC's ability to integrate its internal systems. Only fields used by Qwest are included in the tables.

Table 4.6 - Generic Integration Issues

Issue #	Qwest Field Number	Field Name	Form	Issue	Impact
1	CSRR-68 CSRR-72 CSRR-82 CSRR-88 CSRR-97	FFIDDATA	CSRR	Qwest defines the field length as variable. This field is mapped from the MSG01, which has a field length of 264. The field is not listed in either the Disclosure or the EDI Data Document as repeating. CLECs cannot determine the maximum field length.	Υ
2	CSRR-68 CSRR-72 CSRR-82 CSRR-88 CSRR-97	FFIDDATA	CSRR	The FFID can define the FFIDDATA as being a TN. However, the TN format is not consistent with Qwest EDI requirements. The format may or may not include the area code. There also may not be a dash between the area code and the NXX; it appears that Qwest uses a space. This impacts the processing of multi-line	Y
	CSRR-55			account information. Qwest defines the field length as variable. This field is mapped from the MSG01, which has a field length of 264. The field	
3	CSRR-69 LFIDDATA	CSRR	is not listed in either the Disclosure or the EDI Data Document as repeating. CLECs cannot determine the maximum field length.	Y	



Table 4.7 – Field Length Variations Across Qwest Pre-Order Forms

Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
		17	AVQ	15		
	}	17	AVR	15		
		24b	AVR	15		-
		24y	AVR	15	The CSRR-48 is part of the Service	
4	BLDG	48	CSRR	9	Address in the Listings Section and is returned by Qwest. Since it is shorter,	N
		19	FAQ	15	it should not have an impact.	
		18	RLDQ	15		
		19	RLDR	15		
		17	TNAQ	15		
		18	CFAR	2	Both the CFAR and MPR list Valid Values for the INVSTAT field. The	
5 IN	INVSTAT	13	MPR	7	listings are not interchangeable. The CLEC must assume, though the field name appears on two different forms,	N
		16	MPR	7	the usage of the field is different for each form.	
		30	AAQ	2	Qwest does not use the REQNUM on the TNAQ. In the TNSQ, the	
	DEONUM	30	CTQ	6	REQNUM is a TN, while in the CTQ and AAQ it is a quantity. The CLEC must assume, though the field name	N
6	REQNUM	30	TNAQ	17		
		30	TNSQ	12	appears on multiple forms, the usage of the field is different for each form.	
		20	AVQ	25		
		20	AVR	25		
		24ag	AVR	25		
		31	CSRQ	25	The SALOC on the DIDD in an	
		51	CSRQ	25	The SALOC on the RLDR is an optional field. Since a CLEC would	
7	SALOC	71	CSRQ	25	not use the address from the RLDR	N
		116	CSRR	25	as the validated address, there should not be an impact.	
		24	FAQ	25		
		23	RLDQ	25		
		22	RLDR	32		
		20	TNAQ	25		
8	SANO	10	AVQ	8	The SANO on the RLDR is an	N



Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
		10	AVR	8	optional field. Since a CLEC would	
		24q	AVR	8	not use the address from the RLDR as the validated address, there should	
		18	CSRQ	8	not be an impact.	
		38	CSRQ	8		
		58	CSRQ	8		
		103	CSRR	8]
		39	CSRR	8		
		15	FAQ	8		
		11	RLDQ	8		
		11	RLDR	12		
		10	TNAQ	8		
		9	AVQ	5		
		9	AVR	5		
		24p	AVR	5		
		17	CSRQ	5	The address submitted in the TNAQ must be a validated address. Since	
		37	CSRQ	5		
9	SAPR	57	CSRQ	5		Y
١	0, 11 11	38	CSRR	5	the AVQ/AVR allows five (5) characters, this could have an impact.	'
		102	CSRR	5	characters, this could have an impact.	
		14a	FAQ	5		
		10	RLDQ	5		
		10	RLDR	5		
		9	TNAQ	4		
10	SASD	12	AVQ	2	While Qwest does not list the Valid	N
		12	AVR	2	Values for the SASD, it does indicate to follow the LSOG 3 guidelines.	
		24r	AVR	2	LSOG 3 indicates a listing for Valid	i i
		20	CSRQ	10	Values. The maximum length for any field on the list is two (2) characters.	
		40	CSRQ	10	This should not have an impact.	
		60	CSRQ	10	1	
		41	CSRR	2	1	
		105	CSRR	2	1	
		16a	FAQ	2	1	
		13	RLDQ	2	1	



Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
		13	RLDR	2		
		12	TNAQ	2	1	
		11	AVQ	4		
		11	AVR	4	1	
		24r	AVR	4	1	
	ļ	19	CSRQ	4		
]	39	CSRQ	4	1	
44	0.4.05	59	CSRQ	4	The SASF at CSRR-40 is part of the	l
11	SASF	40	CSRR	5	Service Address in the Listing Section.	N
		104	CSRR	4	1	
		16	FAQ	4	1	
	}	12	RLDQ	4	-]
	12 RLDR 4	1				
		11	TNAQ	4		
		22	AVQ	5		
		22	AVR	5		
		24ai	AVR	5	1	
	Ì	26	FAQ	5	The SAZC on the RLDR is an optional field. Since a CLEC would not use the	1
		33	CSRQ	5		
12	SAZC	53	CSRQ	5	address from the RLDR as the	N
		73	CSRQ	5	validated address, there should not be an impact.	
		118	CSRR	5	be an impact.	
		25	RLDQ	5		
		24	RLDR	10		
		22	TNAQ	5		
13	UNIT	24	CFAR	5	The CFAR usage of UNIT is in reference to the Cable Pair, while in the RLDR it is used in reference to the address. The CLEC must	
13	UNIT	17	RLDR	10	assume, though the field name appears on two different forms, the usage of the field is different for each form.	N
14	USOCNUM	30b	AAQ	2	In all cases this field represents a	N
		73	CSRR	3	quantity. Since the AAQ is an outbound field, this value can be	



Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
		89	CSRR	3	calculated based on the number of USOCs provided.	

Table 4.8 - Field Length Variations Between Qwest and LSOG

Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
15	26	APPRD	AAQ ASQ	8	12	LSOG allows for two (2) pre- printed hyphens and verbiage about AM or PM. As dashes are not allowed in the EDI Date format, the Qwest usage of eight (8) characters as the field length should not cause an impact.	N
16	17	BLDG	AVQ AVR CSRR FAQ RLDQ TNAQ	15	10	Since the Qwest field is longer, this could impact integration.	Υ
17	3	D/TSENT	All Pre- Order Forms	12	15	LSOG allows for three (3) pre-printed hyphens and verbiage about AM or PM. As dashes are not allowed in the EDI Date format, the Qwest usage of 12 characters as the field length should not cause an impact.	N
18	36	FETAVA	SAQ	5	25	Qwest has set the value equal to the length of a USOC. Since the USOC has to be valid for Qwest, this should not cause an impact.	N



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
19	18	FLOOR	AVQ AVR CSRQ CSRR FAQ RLDQ RLDR TNAQ	15	3	Qwest specifications indicate that only the floor number has to be provided in the field (if no preface is given the default is floor). This should not cause an impact.	N
20	2	INQNUM	All Pre- Order Forms	22	16	Since the Qwest field is longer, this should not cause an impact.	N
21	8	INQRES#	AAR ASR CTQ	10	17	Since this is a Qwest- generated number, it will never be longer than 10 characters. This should not cause an impact.	N
22	28	QNR	TNAQ TNSQ	1	4	Qwest only allows CLECs to request up to nine (9) TNs. In the TNAQ, instead of using the QNR, Qwest uses TNQTY. This could cause an impact, as a CLEC must be able to specify in its system how it can request TNs from Qwest.	Υ
23	30	REQNUM	AAQ CTQ TNSQ	2 6 12	17	Qwest uses the REQNUM field in the AAQ and CTQ to identify a quantity instead of the TN. The TNAQ uses it as a 12-character TN. The CLEC must assume, though the field name appears on multiple forms, the usage of the field is different for each form. This should not cause an impact.	N



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
24	16	ROOM	AVQ AVR CSRQ CSRR FAQ RLDQ RLDR TNAQ	15	9	Since the Qwest field is longer, this could impact integration.	Y
25	20	SALOC	AVQ AVR CSRQ CSRR FAQ RLDQ RLDR TNAQ	25	35	Since the Qwest field is shorter, this could cause an impact.	Υ
26	12	SASD	CSRQ	10	2	Qwest uses the directional abbreviations provided in LSOG. This should not cause an impact.	N
27	11	SASF	AVQ AVR CSRQ CSRR FAQ RLDQ RLDR TNAQ	4	5	Since the Qwest field is shorter, this could cause an impact.	Υ
28	22	SAZC	AVQ AVR CSRQ CSRR FAQ RLDQ RLDR TNAQ	5 5 5 5 5 5 10 5	12	Since the Qwest fields are shorter, this could cause an impact.	Υ



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
29	32	TNRES	CTQ TNAR	12	17	Qwest uses a 12-character phone number. This could cause an impact.	Y



4.1.3.1. Analysis of Data Integration Issues

Table 4.9 indicates the Total Number of data fields with perceived integration issues.

Table 4.9 - Pre-Order Data Integration Issues

Description	Total Number Non- Impacting	% of Non- Impacting	Total Number Impacting	% of Impacting	Total Number of Integration Issues	% of Total
Generic Integration Issues (Table 4.6)	0	0%	3	27%	3	10%
Data Fields with Variations in Length – (Qwest to Qwest) (Table 4.7)	10	56%	1	9%	11	38%
Data Fields with Variations in Length – (Qwest to LSOG) (Table 4.8)	8	44%	7	64%	15	52%
Total Number of Integration Issues	18		11		29	

Note: Six (6) of the same Data Fields appear on both the Qwest-to-Qwest listing and the Qwest-to-LSOG listing.

Table 4.10 summarizes and quantifies perceived integration issues, and shows the percentage of perceived integration issues against the total number of Data Fields Used by Qwest (Table 4.4).

Table 4.10 - Pre-Order Data Integration Issues

Description	Total Number	% of Total
Number of Non-Impacting Data Integration Issues	18	7%
Number of Impacting Data Integration Issues	11	4%
Total Number of Data Integration Issues	29	11%
Total Number of Used Data Fields	275	

Note: If the six (6) fields that appear in both the Qwest-to-Qwest and Qwest-to-LSOG listing of field length variations are only counted once, instead of twice, the percentage of "Total Number of Data Integration Issues" compared to the "Total Number of Used Data Fields" becomes eight percent (8%).



4.1.3.2. Analysis of Pre-Order Integration

HPC determined that the data fields used in the pre-order process can originate from the CLEC or Qwest, or they can be a constant value, a calculation, or a variable. HPC used this information to determine how many of the pre-order data fields were re-used from pre-order to pre-order. Table 4.11 identifies where HPC determined the data originated.

Table 4.11 - Pre-Order Data Field Origination

Description	Total Number	% of Total
Number of Pre-Order fields initiated by CLEC	56	21%
Number of Pre-Order fields initiated by Qwest	178	66%
Number of Pre-Order fields that are constants, calculations, or variable	36	13%
Total Number of Used Data Fields	270	

Table 4.12 identifies the number of pre-order fields that can be used across multiple pre-order forms. As an example, Qwest returns the COMPDATE to the CLEC on the AAR, and this field can subsequently be used on the ASQ and the ASR. When Qwest returns the COMPDATE field on the AAR, the CLEC must be able to integrate this data into its internal application systems in order to re-use the data on the ASQ.

Table 4.12 - Pre-Order Data Field Integration

Description	Total Number	% of Total	
Number of fields used Pre-Order to Pre-Order	155	20%	
Total Number of Data Fields Across All Forms	787		

4.2. Order

This section compares Qwest's order forms to the LSOG 3 standard order forms.

4.2.1. Order Document Descriptions

Table 4.13 identifies the types of EDI orders used in MTP Test 12.

Table 4.13 - Order Types

Order Description	LSR Type
Centrex 21	C21
Centrex Plus	CEX
DID In Only Trunks	DIOT
ISDN-PRI Resale Facility	ISPF



Order Description	LSR Type
ISDN-PRI Resale Trunk	ISPT
Listing Only	LO
Local Number Portability	LNP
PBX	PBX
POTS	POTS
Private Line	PL
Shared Loop	SL
Unbundled Loop Distribution Loop	UDL
Unbundled Loop	LS
Unbundled Loop w/Number Portability	LSNP
UNE-C Private Line	UNEC
UNE-P POTS	UNEP

The Table 4.14 identifies and cross-references the Order forms used in MTP Test 12 with the corresponding LSOG 3 form. Qwest does not use any order forms that are not part of LSOG 3.

Table 4.14 - Order Forms

Form Name	Qwest Form	LSOG Form	
Centrex	CRS	CRS	
DID Resale Service	DRS	DRS	
Directory Listing	DL	DL	
Directory Service Request	DSR	DSR	
End User	EU	EU	
Local Service Request	LSR	LSR	
Loop Service	LS	LS	
Loop Service with Number Portability	LSNP	LSNP	
Number Portability	NP	NP	
Resale	RS	RS	
Resale Private Line	RPL	RPL	

Table 4.15 identifies by each LSR Type, the forms Qwest may require for a CLEC to generate an order, based on order activity.

Table 4.15 - Order Forms by LSR Type

LSR	Forms
Туре	



LSR Type	Forms
C21	LSR, EU, CRS, DSR, DL
CEX	LSR, EU, CRS, DSR, DL
DIOT	LSR, EU, DRS, DL
ISPF	LSR, RPL
ISPT	LSR, EU, RS, DSR, DL
LO	LSR, EU, RS, DSR, DL
LNP	LSR, EU, NP
PBX	LSR, EU, RS, DSR, DL
POTS	LSR, EU, RS, DSR, DL
PL	LSR, RPL
SL	LSR, EU, LS
UDL	LSR, EU, LS
LS	LSR, EU, LS
LSNP	LSR, EU, LSNP
UNEC	LSR, RPL
UNEP	LSR, EU, RS, DSR, DL

4.2.2. Order Field Statistics

HPC first looked at the available order fields as a whole, and then reviewed them on a form-by-form basis.

Once the Data Field compilation was complete, HPC further analyzed whether Qwest included the field on a form, and whether Qwest used the field. Qwest's Disclosure Document defines Field Usage as "Required," "Conditional," "Optional," "Not Used," or "Prohibited." HPC identified only those fields that Qwest identifies as "Required," "Conditional," or "Optional" as Qwest-utilized.

In Table 4.16, HPC calculated the total number of order data fields based on the number of LSOG 3 and Qwest-specific data fields. HPC identified Qwest-specific data fields as any data field that was not included in LSOG 3.

Table 4.16 - Order Data Field Statistics

Description	Total Number	% of Total
LSOG Data Fields	391	94%
Qwest Specific Data Fields	23	6%
Total Number of Data Fields	414	



Table 4.17 identifies how many of the Total Number of Data Fields in Table 4.16 are included in the Qwest IMA EDI Disclosure Document for order processing.

Table 4.17 - Order Data Field Inclusion by Qwest

Description	Total Number	% of Total	Total Number Included	% of Total Included
Qwest-Specific Data Fields – Included	23	6%	23	6%
LSOG Data Fields – Included	390	94%	390	94%
LSOG Data Fields - Not Included	1	0%		
Total Number of Included Data Fields	414		413	

Table 4.18 identifies how many of the Total Number of Included Data Fields in Table 4.17 are used in the Qwest IMA EDI Disclosure Document for order processing.

Table 4.18 - Order Data Field Usage by Qwest

Description	Total Number	% of Total	Total Number Utilized	% of Total Utilized
Qwest Specific Data Fields – Used	19	5%	19	7%
Qwest Specific Data Fields - Not Used	4	1%		
LSOG Data Fields – Used	243	59%	243	93%
LSOG Data Fields – Not Used	147	36%		
Total Number of Used Data Fields	413		262	

Table 4.19 identifies the number of times each data field is used across all Qwest order forms. This analysis specifies which fields are Qwest-specific and which are LSOG fields.

Table 4.19 - Total Number of Order Data Fields across all Order Forms

Description	Total Number	% of Total
LSOG Data Fields	5512	97%
Qwest-Specific Data Fields	187	3%
Total Number of Data Fields	5699	



4.2.3. Data Integration Issues

After reviewing the Qwest IMA EDI Disclosure Document, HPC encountered various issues that could impact a CLEC's ability to integrate its internal systems. These issues are classified into three categories:

- Generic Integration Issues (Table 4.20);
- Field Length Variations Across Qwest Pre-Order Forms (Table 4.21);and,
- Field Length Variations Between Qwest and LSOG (Table 4.22).

The tables classify each issue's perceived impact on a CLEC's ability to integrate its internal systems. Only fields used by Qwest are included in the tables.

Issue **Field Name** Qwest Form Issue **Impact** # Field Number On the LSR form, the length of the ACT is one (1) character. However, in the 1 22 **ACT** LSR **EDI Data Mapping guidelines** the field is cross-referenced to other values of one (1) to two (2) characters. Qwest documentation does not indicate that each Feature Detail can be sent to 68 CRS **FEATURE** Qwest in its own EDI 2 DETAIL segment. It only indicates 60 RS that the segment can repeat, and each Feature Detail must begin with a slash (/).

Table 4.20 - Generic Integration Issues

Table 4.21 - Field Length Variations Across Qwest Order Forms

Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
3	CITY	20	EU	25	The occurrences with	Υ
		23	RPL	25	a field length of 15 are all associated with the BILLNM. Qwest does not use the CITY at LSR-67. This could	
		43	EU	15		
		51	RPL	25		
		67	LSR	15	have an impact.	
		70	RPL	15		



Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
		80	LSR	25		
		97	LSR	25	1	
		9	DRS	44		
		10	LS	36		
٠		10	LSNP	36	Qwest only uses the	
4	CKR	10	NP	36	CKR on the DRS, LS	Y
4	CAR	23	RS	41	and LSNP forms. This	Y
		42	CRS	36	could have an impact.	
		91	RPL	36	1	
		104	RPL	44		
		13	LS	20		
1	· •	13	NP	20		Υ
5	ECCKT	15	LSNP	20	This could have an	
3	ECCKI	24	RS	24	impact.	
		92	RPL	20]	
		105	RPL	20		
6	FEATURE	51	RS	200	This could have an	Υ
L	DETAIL	63	CRS	512	impact.	<u> </u>
		8	EU	60	Qwest does not use	
		76	DSR	25	the NAME field on the	
7	NAME	91	DSR	25	DSR form. This could	Y
		10a	RPL	25	have an impact.	
L		38a	RPL	25		l
		4	CRS	9	Qwest does not use the ORD field on the	
8	ORD	5	DRS	20	CRS form. This could have an	Υ
		6	RS	10	impact.	
9	PORTED#	14	NP	17	This could have an	Υ
	. 51(125#	30	LSNP	12	impact.	•
10	TCOPT	24	NP	3	This could have an	Υ
		30	LS	1	impact.	
		30	RS	1		
		40	LSNP	1		



Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
		52	EU	3		
		47a	CRS	1		



Table 4.22 - Field Length Variations Between Qwest and LSOG

Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact	
	26	ACC	EU	255	115	This could be a		
11	35	ACC	RPL	255	45	This could have an impact.	Υ	
	63	ACC	RPL	255	45			
12	7	AN	LSR	16	20	This could have an impact.	Y	
13	13	APPTIME	LSR	9	11	This should not have an impact, as the A (for AM) or P (for PM) can easily be removed.	N	
14	31	AUTHNM	LSR	25	15	This should not have an impact because it is a CLEC generated field.	N	
15	53	BAN1	LSR	16	13	This should not have an impact because the BAN is defined by the ILEC.	N	
16	55	BAN2	LSR	16	13	This should not have an impact because the BAN is defined by the ILEC.	N	
	19	BLDG	EU	15	9			
17	20	BLDG	RPL	15	9	This could have an impact.	Υ	
,	48	BLDG	RPL	15	9	impuo.		
18	7	СВ	CRS	18	8	This could have an impact.	Υ	
	14	CFA	LS	54	42	In the CFAQ, the		
	16	CFA	LSNP	54	42	CFA is made up of		
19	48	CFA	RS	54	42	five (5) fields with a total length of 42.	N	
	93	CFA	RPL	54	42	This should not		
	106	CFA	RPL	54	42	have an impact.		
20	32	CFTN	LSNP	12	13	Since the Qwest field is shorter, this	N	



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
						should not have an impact.	
21	43	CITY	EU	15	25	This could have an	Υ
	70	CITY	RPL	15	25	impact.	
	9	CKR	DRS	44	41	This should not have an impact. A CIRCUIT in the	
22	10	CKR	LS	36	41	pre-order is 20 characters. The CKR in the DRS allows for a range. Even if one pre-	N _.
	10	CKR	LSNP	36	41	printed hyphen is included, the length is 41.	
23	11	D/TSENT	LSR	12	17	LSOG allows for three (3) preprinted hyphens and verbiage about AM or PM. As dashes are not allowed in the EDI Date format, the Qwest usage of 12 characters as the field length should not cause an impact.	N
24	30	DATED	LSR	8	10	LSOG allows for two (2) pre-printed hyphens. As dashes are not allowed in the EDI Date format, the Qwest usage of eight (8) characters as the field length should not cause an impact.	N
25	101	DDALOC	DSR	25	35	This could have an impact.	Y
26	94	DDASF	DSR	4	5	This could have an	Υ



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
						impact.	
27	103	DDAZC	DSR	5	12	This could have an impact.	Υ
28	12	DDD	LSR	8	10	LSOG allows for two (2) pre-printed hyphens. As dashes are not allowed in the EDI Date format, the Qwest usage of eight (8) characters as the field length should not cause an impact.	N
29	14	DDDO	LSR	8	10	LSOG allows for two (2) pre-printed hyphens. As dashes are not allowed in the EDI Date format, the Qwest usage of eight (8) characters as the field length should not cause an impact.	N
30	16	DFDT	LSR	4	6	This should not have an impact because the difference is the addition of AM or PM.	N
31	8	DIDNUM	DRS	3	4	Since this is a CLEC-assigned number, it should not have an impact.	N
32	78	DISCECCKT	RPL	20	41	Qwest ECCKTs in pre-order are only 20 characters. This should not have an impact	N
33	49	DNUM	EU	4	5	Since this is a CLEC-assigned number, it should not have an impact.	N



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
34	19	DRTI	DRS	4	10	This field in LSOG has a minimum of three (3) and a maximum of 10 characters. It should not have an impact	N
35	23	DSUP	DSR	2	1	This could have an impact.	Υ
36	35	EAN	EU	16	20	Since Qwest's field is shorter, it should not have an impact.	N
	13	ECCKT	LS	20	41	Qwest provides the	
	15	ECCKT	LSNP	20	41	circuit ID with a	
37	24	ECCKT	RS	24	41	length of 20 characters. There	N
	92	ECCKT	RPL	20	41	should not be an	:
	105	ECCKT	RPL	20	41	impact.	
38	50	FEATURE	RS	5	6	Since Qwest uses a USOC in this field, and all Qwest USOCs are five (5)	N
	62	FEATURE	CRS	5	6	characters, it should not have an impact.	
39	51	FEATUREDETAIL	RS	200	24	Qwest documentation does not indicate that CLECs can send multiple MSG segments per FID Detail by beginning	Y
	63	FEATUREDETAIL	CRS	512	24	each segment with a slash (/). If the CLEC is not made aware of this capability, it could be an issue.	
40	17	FLOOR	EU	15	4	Since the Qwest	Υ
	21	FLOOR	RPL	15	9	field is longer, this	



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
	41	FLOOR	EU	15	4	could have an	
	49	FLOOR	RPL	15	9	impact.	
	68	FLOOR	RPL	15	4		
41	105	HID	LSR	4	12	Since Qwest business rules specify a specific format, the field length should not cause an impact.	N
42	102	HNUM	LSR	3	5	Since this is an incremental number beginning with 001, it should not cause an impact.	N
43	110	HTSEQ	LSR	512	10	Since the Qwest field is longer, and contains definite formatting options, this could have an impact.	Y
44	28	INTEXT	DSCR	75	50	Although the Qwest field is longer, the field is primarily used for New Listing and Directory Only. Therefore, it should not have an impact.	N
45	41	LALOC	DL	25	35	Since the Qwest field is shorter, this could have an impact.	Υ
46	35	LASF	DL	4	5	Since the Qwest field is shorter, this could have an impact.	Υ
47	8	LNUM	LS	4	5	Qwest indicates	N
	8	LNUM	LSNP	4	5	this is a sequential number beginning	
	8	LNUM	NP	4	5	with one (1). This should not cause	



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
	9	LNUM	RS	4	5	an impact.	
	29	LNUM	CRS	4	5	1	
48	95	LOCNUM	RPL	4	3	Qwest defines this field as having a maximum of two (2) characters. This should not have an impact.	N
49	5	LQTY	LS	4	3	This could have an	Υ
49	5	LQTY	LSNP	4	3	impact.	i i
50	39	LTC	CRS	4	2	This could have an impact.	Υ
51	8	NAME	EU	60	25	This could have an impact.	Υ
52	6	ORD	RS	10	20	Since Qwest assigns this number, it should not cause an impact.	N
53	14	PORTED#	NP	17	12	This could have an impact.	Υ
	27	REMARKS	DRS	255	160		
	30	REMARKS	NP	255	160	· · · · · · · · · · · · · · · · · · ·	
	36	REMARKS	LS	255	160	Since the	
	46	REMARKS	LSNP	255	160	REMARKS are	
54	58	REMARKS	EU	255	160	determined by the CLEC, this should	N
	67	REMARKS	DL	255	160	not cause an	
	73	REMARKS	DSR	255	160	impact	
	79	REMARKS	RPL	255	160		
	100	REMARKS	LSR	255	160	·	
	18	ROOM	EU	15	9		
	22	ROOM	RPL	15	9	This said become	
55	42	ROOM	EU	15	9	This could have an impact.	Y
	50	ROOM	RPL	15	9		
	69	ROOM	RPL	15	10		
56	45	RORD	LSR	10	17	Since this is a Qwest provided	N



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
						number, it should not have an impact	
57	3	RSQTY	CRS	3	5	This could have an impact.	Y
	11	SASF	EU	4	5	This sould be as	
58	13	SASF	RPL	4	5	This could have an impact.	Y
	41	SASF	RPL	4	5		
59	12	SEQTEXT	DSCR	75	85	This could have an impact.	Υ
60	23	SEQTEXT1	DSCR	75	85	This could have an impact.	Y
61	21	SUP	LSR	2	1	This could have an impact.	Y
62	30	TCOPT	LS	1	3	Although the field is defined in LSOG as three (3) characters, the valid values are	Z
	40	TCOPT	LSNP	1	3	only one (1) character in length. This should not have an impact	
	29	TCPER	NP	8	10	LSOG allows for two (2) pre-printed	
63	33	TCPER	RS	8	10	hyphens. As dashes are not allowed in the EDI	
03	35	TCPER	LS	8	10	Date format, the Qwest usage of eight (8) characters as the field length	N
,	57	TCPER	EU	8	10	should not cause an impact.	
64	13	TLI	RS	12	14	This should not	N
	107	TLI	LSR	12	14	have an impact.	N
65	14	TN	RS	12	23	This should not	N
00	32	TN	CRS	12	23	have an impact.	
66	22	ZIPCODE	EU	5	10	This could have an	Υ



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
	25	ZIPCODE	RPL	5	10	impact.	
	45	ZIPCODE	EU	5	10	_	
	53	ZIPCODE	RPL	5	10		
	72	ZIPCODE	RPL	5	10		

4.2.3.1. Analysis of Data Integration Issues

Table 4.23 identifies the total number of data fields with perceived integration issues.

Table 4.23 -Order Data Integration Issues

Description	Total Number Non- Impacting	% of Non- Impacting	Total Number Impacting	% of Impacting	Total Number of Integration Issues	% of Total
Generic Integration Issues	1	3%	1	3%	2	3%
Data Fields with Variations in Length – (Qwest to Qwest)	0	0%	8	24%	8	12%
Data Fields with Variations in Length – (Qwest to LSOG)	31	97%	25	74%	56	85%
Total Number of Integration Issues	32		34		66	

Note: The eight (8) Data Fields on the Qwest-to-Qwest listing are also present on the Qwest-to-LSOG listing.

Table 4.24 compares the percentage of data fields with perceived integration issues against the "Total Number of Data Fields Used by Qwest" in Table 4.18.

Table 4.24 -Order Data Integration Issues

Description	Total Number	% of Total
Number of Non-Impacting Data Integration Issues	32	8%
Number of Impacting Data Integration Issues	34	8%
Total Number of Data Integration Issues	66	16%
Total Number of Used Data Fields	413	



Note: If the eight (8) fields that appear in both the Qwest-to-Qwest and Qwest-to-LSOG listings of field length variations are only counted once, instead of twice, the percentage of "Total Number of Data Integration Issues" compared to the "Total Number of Used Data Fields" becomes 14 percent.

4.2.3.2. Analysis of Order Integration

Table 4.25 illustrates the number of pre-order fields that can be used across multiple order forms. For example, Qwest returns the COMPTIME to the CLEC on the AAR. CLECs can subsequently use this data on the LSR form in the APPTIME field. When Qwest returns the COMPDATE field on the AAR, the CLEC must be able to integrate this data into its internal application systems in order to re-use the data on the LSR form.

Table 4.25 - Order Data Field Integration

Description	Total Number	% of Total
Number of fields used Pre-Order to Order	117	2%
Total Number of Data Fields Across All Order Forms	5699	

4.3. Post-Order

This section compares Qwest's post-order forms to the LSOG 3 standard post-order forms.

4.3.1. Post-Order Document Descriptions

Table 4.26 identifies the Post-Order query and response documents used in MTP Test 12, and cross-references them with the corresponding LSOG 3 form. HPC considered any form Qwest used that was not part of LSOG 3 to be a non-standard form. Table 4.26 identifies those forms as Completion, LSR Status Query, and Status Change.

Table 4.26 - Post-Order Forms

Document Description	Qwest Form	LSOG Form	Standard or Non Standard Form	
Completion	CN		Non-Standard	
Jeopardy (includes Non-Fatal, Fatal)	JEOP	LSC	Standard	
LSR Status Query / Response	LSRSQ/LSRSR		Non-Standard	
Order FOC and Supplemental	FOC	LSC	Standard	
Status Change Inquiry- Auto Push	SU		Non-Standard	

4.3.2. Post-Order Field Statistics

HPC first looked at the available post-order fields as a whole, and then reviewed them on a form-by-form basis.



Once the Data Field compilation was complete, HPC further analyzed whether Qwest included the field on a form, and whether Qwest used the field. Qwest's Disclosure Document defines Field Usage as "Required," "Conditional," "Optional," "Not Used," or "Prohibited." HPC identified only those fields that Qwest identifies as "Required," "Conditional," or "Optional" as Qwest-utilized.

In Table 4.27, HPC calculated the total number of post-order data fields based on the number of LSOG fields and Qwest-specific data fields. HPC identified Qwest-specific data fields as any post-order data field that was not included in LSOG 3.



Table 4.27 - Post-Order Data Field Statistics

Description	Total Number	% of Total
LSOG Data Fields	98	64%
Qwest-Specific Data Fields	54	36%
Total Number of Data Fields	152	

Table 4.28 indicates how many of the "Total Number of Data Fields" in Table 4.27 are included in the Qwest IMA EDI Disclosure Document for post-order processing.

Table 4.28 - Post-Order Data Field Inclusion by Qwest

Description	Total Number	% of Total	Total Number Included	% of Total Included
Qwest Specific Data Fields - Included	54	36%	54	36%
LSOG Data Fields – Included	97	64%	97	64%
LSOG Data Fields – Not Included	1	1%		
Total Number of Included Data Fields	152		151	

Table 4.29 indicates how many of the "Total Number of Included Data Fields" in Table 4.28 are used in the Qwest IMA EDI Disclosure Document for post-order processing.

Table 4.29 - Post-Order Data Field Usage by Qwest

Description	Total Number	% of Total	Total Number Used	% of Total Used
Qwest Specific Data Fields – Used	54	36%	54	52%
Qwest Specific Data Fields - Not Used	0	0%		
LSOG Data Fields – Used	49	32%	49	48%
LSOG Data Fields – Not Used	48	32%		
Total Number of Used Data Fields	151		103	

Table 4.30 identifies the number of times each data field is used across all of the Qwest post-order forms. This analysis specifies which are Qwest-specific fields and which are LSOG fields.

Table 4.30 - Total Number of Post-Order Data Fields across all Forms

Description	Total Number	% of Total
LSOG Data Fields	157	69%
Qwest-Specific Data Fields	69	31%
Total Number of Data Fields	226	



4.3.3. Data Integration Issues

After reviewing the Qwest IMA EDI Disclosure Document, HPC encountered various issues that could impact a CLEC's ability to integrate its internal systems. These issues are classified into the three categories below:

- Generic Integration Issues (Table 4.31);
- Field Length Variations Across Qwest Pre-Order Forms (Table 4.32);
- Field Length Variations Between Qwest and LSOG (Table 4.33).

The tables classify each issue's perceived impact on a CLEC's ability to integrate its internal systems. Only fields used by Qwest are included in the tables.

Issue **Qwest Field Name** Form Issue **Impact** Field # Number In the FOC, Qwest lists field 81 as 1 81 DINIT FOC DINIT, LSOG 3 lists the field as Ν RT. In the Completion, Qwest lists 2 5 CD/TSENT CN Ν CD/TSENT as C/TSENT.

Table 4.31 – Generic Integration Issues

Table 4.32 – Field Length V	/ariations Across	Qwest Post-Order Form	15
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Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
		23	CN	4	The Qwest business rules indicate that this field is returned from the	
3	DRTI	42	FOC	4	product specific forms. On the DRS,	N
		61e	FOC	10	the field length is four (4). This should not be an issue.	
		8	CN	10	Owest does not use this field on the	Y
		7	FOC	20	Qwest does not use this field on the FOC at field seven (7). The CN	
4	ORD	50c	FOC	20	indicates that this field is obtained from the FOC. This could impact integration.	
٠		9	LSRSQ	10		
		11	JEP	10	intogration.	
		6	CN	3		
5	ORDNUM	50a	FOC	3	This should not cause an impact.	N
ľ	CINDINO	16	LSRSR	10	This should not cause an impact.	I IN
		10	SU	10		



Issue #	Field Name	Qwest Field Number	Forms	Qwest Field Length	Issue	Impact
6	TELNO	15	FOC	12	This should not cause an impact.	N
ľ	ILLINO	32	FOC	17	This should not cause an impact.	IN
		16a	CN	14		
7	TLI	36	FOC	14	This should not cause an impact.	N
		60a	FOC	12		

Table 4.33 – Field Length Variations Between Qwest and LSOG

Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
8	4	AN	FOC	16	20	This should not have an impact.	N
9	22	BAN1	FOC	16	13	This could have an impact.	Υ
10	24	BAN2	FOC	16	13	This could have an impact.	Y
11	11	CD/TSENT	FOC	12	17	This should not have an impact.	N
12	55	CFA	FOC	54	42	Qwest defines the length of the CFA as 42. This should not have an impact.	N
13	53	CKR	FOC	36	41	Qwest defines its circuits with a length of 20 characters. The CKR can also be a range. This could have an impact.	Υ
14	54	ISPID	FOC	15	14	This could have an impact.	Υ
15	6	LSRNO	FOC	11	18	This should not have an impact.	N
16	7	ORD	JEP	10	20	This should not have an impact.	N
17	58	PORTED#	FOC	17	12	This could have an impact.	Y



Issue #	LSOG Field Number	Field Name	Form	Qwest Field Length	LSOG Field Length	Issue	Impact
18	77	RECCKT	FOC	24	41	This should not have an impact.	N
19	102	REMARKS	FOC	500	160	This could have an impact.	Υ
20	32	TELNO	FOC	17	12	This could have an impact.	Y
21	61	TER	FOC	4	8	This should not have an impact.	N
22	51	TN	FOC	12	23	This should not have an impact.	N

4.3.3.1. Analysis of Data Integration Issues

Table 4.34 indicates the total number of post-order data fields with perceived integration issues.

Table 4.34 - Post-Order Data Integration Issues

Description	Total Number Non- Impacting	% of Non- Impacting	Total Number Impacting	% of Impacting	Total Number of Integration Issues	% of Total
Generic Integration Issues	2	13%	0	0%	2	9%
Data Fields with Variations in Length – (Qwest to Qwest)	5	33%	0	0%	5	23%
Data Fields with Variations in Length – (Qwest to LSOG)	8	53%	7	100%	15	68%
Total Number of Integration Issues	15		7		22	

Note: The two (2) Data Fields on the Qwest-to-Qwest listing are also present on the Qwest-to-LSOG listing.

Table 4.35 indicates the percentage of data fields with perceived integration issues against the "Total Number of Data Fields Used by Qwest" in Table 4.29.

Table 4.35 - Post-Order Data Integration Issues

Description	Total Number	% of Total	
Number of Non-Impacting Data Integration Issues	15	10%	
Number of Impacting Data Integration Issues	7	5%	
Total Number of Data Integration Issues	22	15%	
Total Number of Utilized Data Fields	151		



Note: If the two (2) fields that appear in both the Qwest-to-Qwest and Qwest-to-LSOG listing of field length variations are only counted once, the percentage of "Total Number of Data Integration Issues" compared to the "Total Number of Used Data Fields" becomes 13 percent.

5. P-CLEC Data Integration

As part of MTP Test 12, the P-CLEC implemented the following pre-order to pre-order integration functions. The P-CLEC initially added address information into an address table that was subsequently used to populate address fields in the AVQ, CSRQ, FAQ, SAQ, TNAQ, RLDQ and MPQ. Table 5.1 identifies those fields that were integrated in pre-order to pre-order processing.

Field in Maps to Address AVQ CSRQ FAQ SAQ **TNAQ** RLDQ MPQ Table **LNAME** LNAME **CUSTNAME** SANO SANO SANO SANO SANO SANO SASF SASF SASF SASF SASF SASF SASN SASN SASN SASN SASN SASN ROOM ROOM ROOM ROOM ROOM BLDG BLDG BLDG BLDG BLDG **FLOOR FLOOR** FLOOR FLOOR **FLOOR** AHN AHN AHN AHN AHN ROUTE ROUTE ROUTE ROUTE ROUTE **BOX** BOX BOX BOX BOX SALOC SALOC SALOC SALOC SALOC SALOC SAST SAST SAST SAST SAST SAST SAST SAZC SAZC SAZC SAZC SAZC **CALA** CALA CALA CALA CALA SITEID SITEID TTA TTA LSO LSO LSO LSO

Table 5.1 – PCG Pre-Order to Pre-Order Integration

As part of MTP Test 12, the P-CLEC implemented the following pre-order to order integration functions. The P-CLEC initially added address information into an address table that was subsequently used to populate address fields in the LSR, EU, RPL and DL forms. The P-CLEC also used USOC information from CSRR to load Service and Equipment information into a table that was subsequently used in the RS form. Table 5.2 identifies those fields that were integrated in pre-order to order processing.



Table 5.2 – PCG Pre-Order to Order Integration

Table	Data Field	Maps to LSR	Maps to EU	Maps To RS	Maps to RPL	Maps to DL
Address	LNAME		NAME			
Address	SANO		SANO		SANO	LANO
Address	SASF		SASF		SASF	LASF
Address	SASN		SASN		SASN	LASN
Address	ROOM		ROOM		ROOM	
Address	BLDG		BLDG		BLDG	
Address	FLOOR		FLOOR		FLOOR	
Address	AHN		AHN		AHN	
Address	ROUTE		ROUTE		ROUTE	
Address	BOX		BOX		BOX	
Address	SALOC		CITY		CITY	LALOC
Address	SAST		STATE		STATE	LAST
Address	SAZC		ZIPCODE		ZIPCODE	LAZC
Address	CALA		CALA		CALA	
Address	LSO	LSO			RLSO	
Cust Svc	# TN			RSQTY		
Cust Svc	TN			TN		
Cust Svc	PIC			PIC		
Cust Svc	LPIC			LPIC		
Cust Svc	USOC			FEATURE		
Cust Svc	ACTIVITY			FA		
Cust Svc	FFID			FEATUREDETAIL		
				in the format		
]				"/"FFID"space"FFID		
				DATA. Do not map FFID = PIC, LPIC,		J
				or TN.		
Cust Svc	FFIDDATA			FEATUREDETAIL		
Just 5vc	IIIDDAIA			in the format		
				"/"FFID"space"FFID		
				DATA. Do not map		
,				FFID= PIC, LPIC,		
				or TN.		



6. Summary of Findings

The integration process is highly dependent on the internal application system(s), EDI translator, telecom expertise and integration experience of the CLEC. With that stated, HPC does not feel that are any issues that would prohibit a CLEC from integrating Qwest data with their internal application system(s). This does not mean that there are not issues that would have to be resolved between Qwest and the CLEC, but simply that these issues are not insurmountable.

Exhibit B

Qwest Corporation 5/23/02

CONFIDENTIAL AND PROPRIETARY

PUBLIC VERSION

(Redacted)

Exhibit C

Qwest Corporation 5/23/02

CONFIDENTIAL AND PROPRIETARY

PUBLIC VERSION

(Redacted)